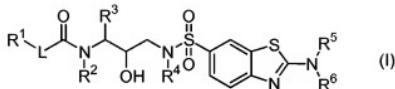


Listing of Claims:

This listing of claims replaces all prior versions, and listings, of claims in the captioned application.

1. (Previously Presented) A method of inhibiting mutant HIV protease in a mammal infected with said mutant HIV protease, said method comprising the step of administering to said mammal a therapeutically effective amount of a compound having the formula



a *N*-oxide, salt, stereoisomeric form, racemic mixture, prodrug, ester or metabolite thereof, wherein

R₁ is hexahydrofuro[2,3-*b*]furanyl, tetrahydrofuranyl, oxazolyl, thiazolyl, pyridinyl, or phenyl optionally substituted with one or more substituents independently selected from C₁₋₆alkyl, hydroxy, amino, halogen, aminoC₁₋₄alkyl and mono-or di(C₁₋₄alkyl)amino;

R₂ is hydrogen or C₁₋₆alkyl;

L is a direct bond, -O-, C₁₋₆alkanediyl-O- or -O-C₁₋₆alkanediyl;

R₃ is phenylC₁₋₄alkyl;

R₄ is C₁₋₆alkyl;

R₅ is hydrogen or C₁₋₆alkyl;

R₆ is hydrogen or C₁₋₆alkyl.

2. (Previously Presented) The method according to claim 1 wherein

R² is hydrogen;

R³ is phenylmethyl;

R⁴ is C₁₋₄alkyl, preferably isobutyl;

R⁵ is hydrogen or methyl;

R⁶ is hydrogen or methyl.

3. (Previously Presented) The method according to claim 1 wherein R⁵ is methyl or hydrogen and R⁶ is hydrogen
4. (Previously Presented) The method according to claim 1 wherein both R⁵ and R⁶ are hydrogen.
5. (Currently Amended) The method according to claim 1 wherein -L-R¹ is -O-(hexahydrofuro[2,3-b]furanyl), -O-tetrahydrofuranyl, -O-methyl-(optionally substituted phenyl), -O-methyl-pyridinyl, -O-methyl-thiazolyl, -O-methyl-thiazolyl, -methyl-O-(optionally substituted phenyl) or optionally substituted phenyl.
6. (Previously Presented) A method of inhibiting mutant HIV protease in a mammal infected with said mutant HIV protease, said method comprising the step of administering to said mammal a therapeutically effective amount of a compound selected from the group consisting of:
 - {3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-carbamic acid hexahydro-furo[2,3-b]furan-3-yl ester;
 - {3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-carbamic acid thiazol-5-ylmethyl ester;
 - {1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-carbamic acid hexahydro-furo[2,3-b]furan-3-yl ester;
 - {1-benzyl-3-[(2-dimethylamino-benzothiazole-6-sulfonyl)-isobutyl-amino]-2-hydroxy-propyl}-carbamic acid hexahydro-furo[2,3-b]furan-3-yl ester;
 - {3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-carbamic acid benzyl ester;
 - N-{3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-2-(2,6-dimethyl-phenoxy)-acetamide;
 - {3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-carbamic acid pyridin-3-ylmethyl ester;

3-amino-N-{3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-2-methyl-benzamide;

N-{3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-3-hydroxy-2-methyl-benzamide;

{3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-carbamic acid tetrahydro-furan-3-yl ester;

N-{3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-2-methyl-benzamide;

N-{1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-2-(2,6-dimethyl-phenoxy)-acetamide;

N-{3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-3-fluoro-2-methyl-benzamide;

N-{3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-2-(4-aminomethyl-2,6-dimethyl-phenoxy)-acetamide;

{1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-carbamic acid thiazol-5-ylmethyl ester;

3-amino-N-{1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-2-methyl-benzamide;

{1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-carbamic acid tetrahydro-furan-3-yl ester;

N-{1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-3-hydroxy-2-methyl-benzamide;

N-{3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-2-(4-iodo-2,6-dimethyl-phenoxy)-acetamide;

2-(4-aminomethyl-2,6-dimethyl-phenoxy)-N-{1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-acetamide;

2-(4-amino-2,6-dimethyl-phenoxy)-N-{1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-acetamide;

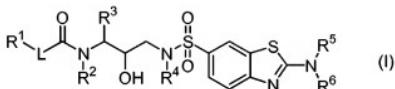
N-{1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-4-bromo-2-methyl-benzamide;

{1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-carbamic acid oxazol-5-ylmethyl ester;
4-amino-N-{1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-3-hydroxy-2-methyl-benzamide; and
or a salt, or a stereoisomeric form thereof.

7. (Previously Presented) The method according to claim 1 wherein the mutant HIV protease has at least one mutation at a position selected from 10, 71 and 84.

8. (Previously Presented) The method according to claim 1 wherein the fold resistance of the mutant HIV protease for the compound described in claim 1 ranges between 0.01 and 100.

9. (Original) A compound having the formula



a *N*-oxide, salt, stereoisomeric form, racemic mixture, prodrug, ester or metabolite thereof, wherein

R₁ is hexahydrofuro[2,3-*b*]furanyl, tetrahydrofuranyl, oxazolyl, thiazolyl, pyridinyl, or phenyl optionally substituted with one or more substituents independently selected from C₁₋₆alkyl, hydroxy, amino, halogen, aminoC₁₋₄alkyl and mono-or di(C₁₋₄alkyl)amino;

R₂ is hydrogen or C₁₋₆alkyl;

L is a direct bond, -O-, C₁₋₆alkanediyl-O- or -O-C₁₋₆alkanediyl;

R₃ is phenylC₁₋₄alkyl;

R₄ is C₁₋₆alkyl;

R₅ is hydrogen or C₁₋₆alkyl;

R₆ is hydrogen or C₁₋₆alkyl;

provided that the compound is other than :

{(1*S*,2*R*)-3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-carbamic acid benzyl ester;

{(1S,2R)-3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-carbamic acid pyridin-3-ylmethyl ester;

{(1S,2R)-3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-carbamic acid thiazol-5-ylmethyl ester;

{(1S,2R)-3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-2-(2,6-dimethyl-phenoxy)-acetamide;

3-amino-{(1S,2R)-3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-2-methyl-benzamide;

4-amino-{(1S,2R)-3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-2-methyl-benzamide;

5-amino-{(1S,2R)-3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-2-methyl-benzamide;

N-{(1S,2R)-3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-2-methyl-benzamide;

N-{(1S,2R)-3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-4-hydroxy-2-methyl-benzamide;

N-{(1S,2R)-3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-3-hydroxy-2-methyl-benzamide; and

{(1S,2R)-3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-carbamic acid (S)-(tetrahydrofuran-3-yl) ester.

10. (Original) A compound according to claim 9 wherein R¹ is hexahydrofuro[2,3-b]furanyl or oxazolyl.

11. (Original) A compound according to claim 9 wherein R₁ is hexahydrofuro[2,3-b]furanyl, tetrahydrofuranyl, oxazolyl, thiazolyl, and L is a direct bond.

12. (Original) A compound according to claim 9 wherein R₁ is hexahydrofuro[2,3-b]furanyl, oxazolyl, thiazolyl, pyridinyl, or phenyl optionally substituted with one or more substituents

independently selected from C₁₋₆alkyl, hydroxy, amino, halogen, aminoC₁₋₄alkyl and mono-or di(C₁₋₄alkyl)amino; and L is -O-.

13. (Currently Amended) A compound e according to claim 9 wherein R₁ is hexahydrofuro[2,3-b]furanyl, tetrahydrofuranyl, oxazolyl, or phenyl substituted with one or more substituents independently selected from C₁₋₆alkyl, hydroxy, amino, halogen, aminoC₁₋₄alkyl and mono-or di(C₁₋₄alkyl)amino; and L is C₁₋₆alkanediyl-O- whereby the -O- is attached to the nitrogen of the amide.

14. (Original) A compound according to claim 9 wherein R₁ is hexahydrofuro[2,3-b]furanyl, tetrahydrofuranyl, oxazolyl, thiazolyl, pyridinyl, or phenyl optionally substituted with one or more substituents independently selected from hydroxy, amino, halogen, aminoC₁₋₄alkyl and mono-or di(C₁₋₄alkyl)amino; and L is -O-C₁₋₆alkanediyl whereby -O- is attached to the R¹ group.

15. (Previously Presented) A compound according to claim 9 wherein at least one of R₅ and R₆ is C₁₋₆alkyl.

16. (Previously Presented) A compound according to claim 9 wherein R² is hydrogen; R³ is phenylmethyl; R⁴ is C₁₋₄alkyl.

17. (Currently Amended) A compound ~~according to claim 9~~ having the formula {1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-carbamic acid hexahydro-furo[2,3-b]furan-3-yl ester;
{1-benzyl-3-[(2-dimethylamino-benzothiazole-6-sulfonyl)-isobutyl-amino]-2-hydroxy-propyl}-carbamic acid hexahydro-furo[2,3-b]furan-3-yl ester;
N-{1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-2-(2,6-dimethyl-phenoxy)-acetamide;
N-{3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-3-fluoro-2-methyl-benzamide;

N- {3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-2-(4-aminomethyl-2,6-dimethyl-phenoxy)-acetamide;
{1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-carbamic acid thiazol-5-ylmethyl ester;
3-amino-N- {1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-2-methyl-benzamide;
{1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-carbamic acid tetrahydro-furan-3-yl ester;
N- {1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-3-hydroxy-2-methyl-benzamide;
N- {3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-2-(4-iodo-2,6-dimethyl-phenoxy)-acetamide;
2-(4-aminomethyl-2,6-dimethyl-phenoxy)-N- {1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-acetamide;
2-(4-amino-2,6-dimethyl-phenoxy)-N- {1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-acetamide;
N- {1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-4-bromo-2-methyl-benzamide;
{1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-carbamic acid oxazol-5-ylmethyl ester;
4-amino-N- {1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-3-hydroxy-2-methyl-benzamide; or
a salt thereof, or a stereoisomeric form thereof.

18. (Currently Amended) A compound that is according to claim 9, selected from the group consisting of:

{3-[(2-amino-benzothiazole-6-sulfonyl)-isobutyl-amino]-1-benzyl-2-hydroxypropyl}-carbamic acid hexahydro-furo[2,3-b]furan-3-yl ester;
{1-benzyl-2-hydroxy-3-[isobutyl-(2-methylamino-benzothiazole-6-sulfonyl)-amino]-propyl}-carbamic acid hexahydro-furo[2,3-b]furan-3-yl ester;

{1-benzyl-3-[(2-dimethylamino-benzothiazole-6-sulfonyl)-isobutyl-amino]-2-hydroxy-propyl}-carbamic acid-hexahydro-furo[2,3-b]furan-3-yl ester;
or a salt or stereoisomeric form thereof.

19. (New) The method according to claim 2 wherein the mutant HIV protease has at least one mutation at a position selected from 10, 71 and 84.

20. (New) The method according to claim 3 wherein the mutant HIV protease has at least one mutation at a position selected from 10, 71 and 84.

21. (New) The method according to claim 4 wherein the mutant HIV protease has at least one mutation at a position selected from 10, 71 and 84.

22. (New) The method according to claim 5 wherein the mutant HIV protease has at least one mutation at a position selected from 10, 71 and 84.

23. (New) The method according to claim 6 wherein the mutant HIV protease has at least one mutation at a position selected from 10, 71 and 84.